

FY99**Project 97-010-00: Transition Project for PIT Tag Detection****BPA Contact:** John Rowan**Project Objective:**

Replace 400 kHz PIT tag interrogation system currently in use in the Columbia River Basin with 134.2 kHz, ISO-based transceiver system.

Rationale for Non-Discretionary Status:

A functional and well-maintained juvenile salmonid PIT tag detection system is fundamental to performing mainstem research, monitoring, and evaluation. This project changes out the old 400 kHz stationary monitors on the mainstem Columbia and Snake Rivers and replaces them with the new 134.2 kHz, ISO frequency. It also provides regional field biologists with portable (hand-held) monitors and PIT tags having the new ISO frequency for use in tagging juvenile salmonids. The ability to maintain the existing 400 kHz system for an extended period of time is extremely limited. As a result, the transition is essential to ensure the region is able to continue collecting PIT tag data. A considerable amount of time and money has been expended in developing and testing prototype monitors, and the implementation phase is about to begin. Deferring the change-over would add to the total costs, rather than decrease them.

FY99 Project Description Criticisms from Appendix A of ISRP Comments on Proposals:

1. This proposal can benefit from expanded description.

The concept is very basic. The Columbia River Basin has an antiquated 400 kHz PIT tag interrogation system. To ensure that the system remains functional, its efficiency improved and its capability to read returning PIT-tagged adult salmonids enhanced, it is being upgraded to the ISO-based, 134.2 kHz frequency. The upgrade includes: stationary monitors, portable monitors, PIT tags, communication equipment (fiber optics and electrical), computer equipment, RF shielding and access structures.

2. The budget only includes capital acquisitions or improvements without detail on the overall cost/benefits.

The benefits of the new system are valuable only if researchers and policy makers take advantage of the information that the system can produce. In and of itself, the project will not result in increased adult salmonid returns to the Columbia River Basin.

Estimating the overall cost is a bit more difficult. There are a number of costs that have been incurred over the past several years leading up to the actual Transition Project; there are also O&M costs that will continue as long as the new system is in use. The estimated costs shown below relate specifically to purchase of prototype stationary and portable monitors, tag

development, and construction of necessary infrastructure; they do not include individual agency staff time involved with the development and evaluation of the project or current and future O&M costs associated with operation of the new system:

FY96	\$ 250,000
FY97	\$ 222,010
FY98	\$1,984,636
FY99	\$ 800,000
	<u>\$3,256,646</u>

3. The proposal should ensure that the needs of all user groups will be satisfied.

As identified in the project proposal, the Transition Team is comprised of people that represent the user groups, i.e., IDFG, WDFW, USFWS, NMFS, PSMFC, Corps of Engineers, BPA. Although invited to participate, the Tribes have elected not to participate.

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